

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A printable gas-barrier laminate consisting of a plastic substrate (A), an inorganic film (B) having a thickness of 0.5 to 40 nm formed on at least one surface of the plastic substrate (A), and a polyester-based resin layer (C) having a thickness of 0.5 to 5 μm formed by applying a coating material containing a polyester-based resin on a surface of the inorganic film (B), said polyester-based resin having a glass transition temperature of 50 to 70°C, a weight average molecular weight of 1500 to 15000 and a hydroxyl value of 10 to 60 mg KOH/g, and said gas-barrier laminate having an oxygen permeability of not more than 5 cc/m²/day/atm and a water vapor permeability of not more than 5 g/m²/day.
2. (Currently Amended) A printable gas-barrier laminate according to claim 1, wherein the plastic substrate (A) comprises a polyester resin, a nylon resin, a polyolefin resin or a biodegradable resin.
3. (Currently Amended) A printable gas-barrier laminate according to claim 1, wherein the coating material contains a fatty acid, a fatty ester, a fatty amide or a mixture thereof in an amount of 0.1 to 20 parts by weight based on 100 parts by weight of the polyester-based resin.

4. (Currently Amended) A printable gas-barrier laminate according to claim 1, wherein the coating material contains a polyisocyanate as a curing agent.

5. (Currently Amended) A printable gas-barrier laminate according to claim 4, wherein a content of the polyisocyanate in the coating material is 0.8 to 1.5 times a hydroxyl equivalent of the polyester-based resin.

6. (Canceled).

7. (Currently Amended) A printable gas-barrier laminate according to claim 1, wherein the inorganic thin film (B) is a physically vapor-deposited film or a chemically vapor-deposited film comprising silicon oxide, aluminum oxide, diamond-like carbon or a mixture thereof.

8. (Canceled).

9. (Currently Amended) A printable gas-barrier laminate according to claim 28, wherein the anchor coat layer comprises at least one material selected from the group consisting of a polyester-based resin, an urethane resin, an acrylic resin and an oxazoline group-containing resin.

10.-11. (Canceled).

12. (Currently Amended) A printable gas-barrier laminate according to claim 28, wherein after forming the inorganic film (B) on the plastic substrate (A) or on the anchor coat layer formed on the plastic substrate (A), the resultant laminate is heat-treated at a temperature of not less than 60°C, and then the coating material containing the polyester-based resin is applied onto the inorganic thin film (B) to form the polyester-based resin layer (C) thereon.

13. (Currently Amended) A printable gas-barrier laminate according to claim 1, wherein when the laminate is subjected to hydrothermal treatment under pressure at 120°C for 30 min, a ratio of an oxygen permeability of the laminate before the hydrothermal treatment to that after the hydrothermal treatment is not more than 5.

14. (Currently Amended) A printable gas-barrier laminate according to claim 28, wherein when the laminate is subjected to hydrothermal treatment under pressure at 120°C for 30 min, an adhesion strength between the plastic substrate (A) or the anchor coat layer formed on the plastic substrate (A) and the inorganic film (B) is not less than 100 g/15 mm.

15. (Currently Amended) A printable gas-barrier laminate according to claim 1, wherein when the laminate is subjected to hydrothermal treatment under pressure at 120°C for 30 min, an adhesion strength between the printed layer and the polyester-based resin layer is not less than 100 g/15 mm.

16. (Withdrawn) A process for preparing a gas-barrier laminate comprising the steps of:

(1) forming on at least one surface of the plastic substrate (A) an inorganic film (B) having a thickness of 0.5 to 40 nm,

(2) applying an anchor coat layer disposed between plastic substrate (A) and inorganic film layer (B)

wherein after forming the inorganic film (B) on the plastic substrate (A) or on the anchor coat layer formed on the plastic substrate (A), heat-treating the resultant laminate at a temperature of not less than 60°C, and then

(3) applying a coating material containing a polyester-based resin on a surface of the inorganic film (B) to form a polyester-based resin layer (C) having a thickness of 0.5 to 5 μm ,

wherein: said polyester-based resin having a glass transition temperature of 50 to 70°C, a weight average molecular weight of 1500 to 15000 and a hydroxyl value of 10 to 60 mg KOH/g, and

said gas-barrier laminate having an oxygen permeability of not more than 5 cc/m²/day/atm and a water vapor permeability of not more than 5 g/m²/day.

17. (Withdrawn) The process according to claim 16, wherein the plastic substrate (A) comprises a polyester resin, a nylon resin, a polyolefin resin or a biodegradable resin selected from starch/polycaprolactone, polycaprolactone, polyethylene succinate, polybutylene succinate, polybutylene succinate/adipate, polyester carbonate, aromatic polyester, cellulose acetate and chemically modified starch.

18. (Withdrawn) The process according to claim 16, wherein the coating material of step (3) contains a fatty acid, a fatty ester, a fatty amide or a mixture thereof in an amount of 0.1 to 20 parts by weight based on 100 parts by weight of the polyester-based resin.

19. (Withdrawn) The process according to claim 16, wherein the coating material contains a polyisocyanate as a curing agent.

20. (Withdrawn) The process according to claim 19, wherein a content of the polyisocyanate in the coating material is 0.8 to 1.5 times a hydroxyl equivalent of the polyester-based resin.

21. (Withdrawn) The process according to claim 16, wherein the inorganic thin film (B) is a physically vapor-deposited film or a chemically vapor-deposited film comprising silicon oxide, aluminum oxide, diamond-like carbon or a mixture thereof.

22. (Withdrawn) The process according to claim 16, wherein the anchor coat layer comprises at least one material selected from the group consisting of a polyester-based resin, an urethane resin, an acrylic resin and an oxazoline group-containing resin.

23. (Withdrawn) The process according to claim 16, further comprising forming a printed layer on a surface of the polyester-based resin layer (C), and forming a heat seal layer on a surface of the printed layer.

24. (Withdrawn) The process according to claim 23, further comprising applying at least one paper or plastic film disposed between the printed layer and the heat seal layer.

25. (Currently Amended) A printable gas-barrier laminate produced by the process of claim 16, wherein when the laminate is subjected to hydrothermal treatment under pressure at 120°C for 30 min, a ratio of an oxygen permeability of the laminate before the hydrothermal treatment to that after the hydrothermal treatment is not more than 5.

26. (Currently Amended) A printable gas-barrier laminate produced by the process of claim 16, wherein when the laminate is subjected to hydrothermal treatment under pressure at 120°C for 30 min, an adhesion strength between the plastic substrate (A) or the anchor coat layer formed on the plastic substrate (A) and the inorganic film (B) is not less than 100 g/15 mm.

27. (Currently Amended) A printable gas-barrier laminate produced by the process of claim 16, wherein when the laminate is subjected to hydrothermal treatment under pressure at 120°C for 30 min, an adhesion strength between the printed layer and the polyester-based resin layer is not less than 100 g/15 mm.

28. (Currently Amended) A printable gas-barrier laminate consisting of a plastic substrate (A), an inorganic film (B) having a thickness of 0.5 to 40 nm formed on at least one surface of the plastic substrate (A),

a polyester-based resin layer (C) having a thickness of 0.5 to 5 μm formed by applying a coating material containing a polyester-based resin on a surface of the inorganic film (B), and an anchor coat layer disposed between the plastic substrate (A) and the inorganic thin film (B) wherein said polyester-based resin having a glass transition temperature of 50 to 70°C, a weight average molecular weight of 1500 to 15000 and a hydroxyl value of 10 to 60 mg KOH/g, and

said gas-barrier laminate having an oxygen permeability of not more than 5 cc/m²/day/atm and a water vapor permeability of not more than 5 g/m²/day.